



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001UT
Revision No:
2

This is to certify:

That

Intolcast Pvt. Ltd.
Rajkot 360024, Gujarat,
India

is an approved manufacturer of
Steel Castings

in accordance with

DNV rules for classification – Ships
DNV class programme – DNV-CP-0246 Steel castings

and the following particulars:

| | |
|---------------------------------------|---|
| Application area | Castings for hull structures and equipment |
| Steel type(s) | Stainless steel castings Carbon and carbon-manganese, Austenitic stainless, See page 2 |
| Casting method | Investment casting |
| Max. weight | See page 2 |
| Max. wall thickness | See page 2 |
| Heat treatment condition | See page 2 |
| Additional approval conditions | See page 2 |

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2023-12-21**

This Certificate is valid until **2026-12-31**.

DNV local unit: **India**

Approval Engineer: **Christian Wildhagen**



for **DNV**

This document has been digitally signed and will
therefore not have handwritten signature

Stefan Röhr

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: AM 311

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Particulars of the approval

Castings for hull structure and equipment

| Steel type | Grade | Casting method ¹⁾ | Max. weight [kg] | Max. wall thickness [mm] | Heat treatment condition ²⁾ |
|------------|---------------------------------------|------------------------------|------------------|--------------------------|--|
| C and C-Mn | NV C400UW, NV C440UW, NV C480UW | IC | 50 | 85 | N, QT |

Stainless steel castings

| Steel type | Grade | Casting method ¹⁾ | Max. weight [kg] | Max. wall thickness [mm] | Heat treatment condition ²⁾ |
|------------|--|------------------------------|------------------|--------------------------|--|
| Austenitic | GX 2 CrNi 18 10 (304L), GX 5 CrNi 19 9 (304), GX 6 CrNiNb 19 10 (347), GX 2 CrNiMo 19 11 2 (316L), GX 5 CrNiMo 19 11 2 (316), GX 5 CrNiMo 19 11 3 (317) | IC | 50 | 85 | SHT |

Remarks:

- ¹⁾ IC: Investment Casting
- ²⁾ SHT: Solution Heat Treated (Solution Annealing)
- N: Normalised
- QT: Quenched and tempered

Special conditions:

Including austenitic stainless steel for low temperature service